

REMARKS

Status Of Application

Claims 1-29 are pending in the application; the status of the claims is as follows:

Claims 1-29 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,768,604 to Yamazaki et al. ("Yamazaki") in view of U.S. Patent No. 5,627,569 to Matsuzaki et al. ("Matsuzaki").

Claims 2, 6, 8, 16, 20, and 22 are being cancelled.

Claims 30-32 are being added.

Claim Amendments

Claims 1, 5, 11, 15, 19, and 24 have been amended to more particularly point out and distinctly claim the invention. These changes do not introduce any new matter.

35 U.S.C. § 103(a) Rejection

The rejection of claims 1, 3-5, 7, 9-15, 17-19, 21, and 23-29 under 35 U.S.C. § 103(a), as being unpatentable over Yamazaki in view of Matsuzaki, is respectfully traversed based on the following:

Yamazaki shows a process for operating a laptop computer where a sleep mode is entered after a predetermined period of inactivity. A timer is set to an initial value (72). A check is then made to determine if either keyboard activity has occurred (73) or video activity has occurred (75). If so, the timer is reset (74). If not, the timer is incremented (76). If the timer is greater than a specified value, the sleep or standby mode is entered (78). If not, the process loops back to check for keyboard or video activity.

Matsuzaki shows the use of ferro-electric liquid crystal displays (FLCD). These displays have the property of maintaining their state after power is removed (col. 1, lines 45-56). Because the display will be maintained at power-off, Matsuzaki shows a process for erasing the display when a power-off command has been received (col. 5, line 62 – col. 6., line 29).

In contrast to the cited references, claim 1 includes:

a display which uses a material having a memory effect, the display having a write mode for writing an image on the display and a display mode for displaying the image written in the write mode without electric power, and when the write mode is interrupted before completion of the writing of the image, an incomplete image including a part of the image remains to be displayed on the display in the display mode;

...

a first input member to be operated by an operator to issue a turn off command to turn of the electric power source; and

a controller which, in response to a command to turn off the electric power source which is issued while the display is performing writing of an image based on display data by consuming electric power supplied from the electric power source, turns off the electric power source after completion of the writing of the image which is being written on the display based on the image data when the command to turn off the electric power source is issued;

whereby the display displays a complete image based on the image data after the electric power source has been turned off.

As noted in Applicants' prior response, Matsuzaki shows a process of erasing the display in response to a power-off command. Neither of the cited references shows or suggests completing the image being written when a command to turn off the device is entered while writing of the image is in progress.

In response, the Examiner has reiterated the nonsensical interpretation of the timer value reset step 74 in Yamazaki as a command to turn off power to the display. This step in Yamazaki does no more than delay a process for monitoring activity that is already occurring during the entire normal operation of the device of Yamazaki. A command to turn off power to the display is not issued until the step of shifting to the standby mode 78.

Nonetheless, claim 1 has been amended to specifically state that the command to turn of power to the display is the result of an input to “a first input member to be operated by an operator to issue a turn off command to turn off the electric power source.” As noted in Figure 4 of Yamazaki, the operation of the power switch 406 is completely independent of the standby (402) and suspend (403) modes. None of the cited references show or suggest “a controller which ... turns off the electric power source after completion of the writing of the image which is being written on the display based on the image data when the command to turn off the electric power source is issued” where the turn off command is issue by an operator operating the first member.

Furthermore, claim 1 has be amended to explicitly state that the display is capable of displaying “the image written in the write mode without electric power” and, as such “when the write mode is interrupted before completion of the writing of the image, an incomplete image including a part of the image remains to be displayed on the display in the display mode.” The cited references show or suggest this limitation.

To support a *prima facie* case of obviousness, the combined references must show or suggest every limitation of the claim. MPEP §2143.03. Therefore, the cited references do not support a *prima facie* case for obviousness of claim 1 and claim 1 is patentably distinct from the cited references. Claims 3 and 4 are dependent upon claim 1 and thus include every limitation of claim 1. Therefore, the cited references do not support a *prima facie* case for obviousness of claims 3 and 4, and claims 3 and 4 are also patentably distinct from the cited references.

Support for claim 1 as amended is in the specification at page 2, lines 10-12 and page 22, line 7.

Also in contrast to the cited references, claim 5 includes:

a display which uses a material having a memory effect, the display having a write mode for writing an image on the display based on image data

and a display mode for displaying the image written in the write mode without electric power, and when the write mode is interrupted before completion of the writing of the image, an incomplete image including a part of the image remains to be displayed on the display in the display mode;

...

an input member to be manually operated by an operator to input a specified command;

a timer for counting elapsed time; and

a controller that resets a timer valued when the manual operation of the input member is conducted, and increments the timer value when the write mode has been completed; ...

Thus, the timer increments the timer so that the power is turned off when the write mode has completed. In contrast, the process of Yamazaki will not turn off the power until the predetermined time established by the counter has elapsed. The cited references do not show or suggest this limitation.

In addition, as with claim 1, the cited references do not show or suggest a display that is capable of displaying "the image written in the write mode without electric power" and, as such "when the write mode is interrupted before completion of the writing of the image, an incomplete image including a part of the image remains to be displayed on the display in the display mode." The cited references show or suggest this limitation.

Therefore, the cited references do not support a *prima facie* case for obviousness of claim 5 and claim 5 is patentably distinct from the cited references. Claims 7, 9 and 10 are dependent upon claim 5 and thus include every limitation of claim 5. Therefore, the cited references do not support a *prima facie* case for obviousness of claims 7, 9 and 10, and claims 7, 9 and 10 are also patentably distinct from the cited references.

Support for claim 5 as amended is in the specification at page 2, lines 10-12 and page 49, line 7 – page 50, line 1.

Also in contrast to the cited references, claim 11 includes:

a display using a material having a memory effect, the display having a write mode for writing an image on the display based on display data and a display mode for displaying the image written in the write mode without electric power, and when the write mode is interrupted before completion of the writing of the image, an incomplete image including a part of the image remains to be displayed on the display in the display mode;

a first input member which is manually operated by an operator to input a specified command to instruct the electronic information device how to operate; and

a controller which, when the first input member is operated while writing of an image based on display data on the display is being performed, invalidates the command sent from the first input member and, when the first input member is operated after completion of the writing of an image based on display data, controls the electronic information device in accordance with the command sent from the first input member;

whereby when the first input member is operated during writing of an image based on the display data on the display, the display completely displays the image which was being written based on the display data when the first input member was operated after an electric power source supplying power to the display has been turned off.

Neither of the cited references shows or suggests “a first input member which is manually operated by an operator to input a specified command to instruct the electronic information device how to operate” with “a controller which, when the first input member is operated while writing of an image based on display data on the display is being performed, invalidates the command sent from the first input member.” In addition, the cited references do not show or suggest a display that is capable of displaying “the image written in the write mode without electric power” and, as such “when the write mode is interrupted before completion of the writing of the image, an incomplete image including a part of the image remains to be displayed on the display in the display mode.”

Therefore, the cited references do not support a *prima facie* case for obviousness of claim 11 and claim 11 is patentably distinct from the cited references. Claims 12-14 are dependent upon claim 11 and thus include every limitation of claim 11. Therefore, the cited

references do not support a *prima facie* case for obviousness of claims 12-14 and claims 12-14 are also patentably distinct from the cited references.

Support for claim 11 as amended can be found in the specification at Page 22, line 7 and 11-15, and page 22, line 25 – page 23, line 1.

Also in contrast to the cited references, claim 15 includes:

writing an image based on display data on a display which uses a material having a memory effect by supplying electric power to the display from an electric power source, the display having a write mode for writing an image on the display and a display mode for displaying the image written in the write mode without electric power, and when the write mode is interrupted before completion of the writing of the image, an incomplete image including a part of the image remains to be displayed on the display in the display mode;
commanding a power-off of the electric power source in response to an operating of a first input member by an operator; and
when a power-off of the electric power source is commanded while the display is performing writing of an image based on display data by consuming electric power supplied from the electric power source, executing the power-off command after completion of the writing of the image which is being written on the display based on the display data when the power off of the electric power source is commanded;
whereby when the power off of the electric power source is commanded while the display is performing writing of an image based the display data, the display displays a complete image based on the display data after the electric power source has been turned off.

Neither of the cited references shows or suggests a process using “a controller which ... turns off the electric power source after completion of the writing of the image which is being written on the display based on the image data when the command to turn off the electric power source is issued” where the turn off command is issue by an operator operating the first member. In addition, the cited references do not show or suggest a process using a display that is capable of displaying “the image written in the write mode without electric power” and, as such “when the write mode is interrupted before completion of the writing of the image, an incomplete image including a part of the image remains to be displayed on the display in the display mode.”

Therefore, the cited references do not support a *prima facie* case for obviousness of claim 15 and claim 15 is patentably distinct from the cited references. Claims 17 and 18 are dependent upon claim 15 and thus include every limitation of claim 15. Therefore, the cited references do not support a *prima facie* case for obviousness of claims 17 and 18, and claims 17 and 18 are also patentably distinct from the cited references.

Support for claim 15 as amended is in the specification at page 2, lines 10-12 and page 22, line 7.

Also in contrast to the cited references, claim 19 includes:

- a write step of writing an image based on display data on a display which uses a material having a memory effect by supplying electric power to the display from an electric power source, the display having a write mode for writing an image on the display and a display mode for displaying the image written in the write mode without electric power, and when the write mode is interrupted before completion of the writing of the image, an incomplete image including a part of the image remains to be displayed on the display in the display mode;

- an automatic power-off step of automatically turning off the electric power source when a timer value of a timer exceeds a predetermined value;

- an increment step of the timer value which increments the timer value when the write mode has been completed; and

- a resetting step that resets the timer value when a manual operation of an input member is operated by an operator to input a specific command;

- whereby the display displays a complete image based on the display data after the electric power source has been turned off.

As noted above, neither of the cited references shows or suggests a timer increments the timer so that the power is turned off when the write mode has completed. In addition, the cited references do not show or suggest a display that is capable of displaying “the image written in the write mode without electric power” and, as such “when the write mode is interrupted before completion of the writing of the image, an incomplete image including a part of the image remains to be displayed on the display in the display mode.”

Therefore, the cited references do not support a *prima facie* case for obviousness of claim 19 and claim 19 is patentably distinct from the cited references. Claims 21 and 23 are dependent upon claim 19 and thus include every limitation of claim 19. Therefore, the cited references do not support a *prima facie* case for obviousness of claims 21 and 23, and claims 21 and 23 are also patentably distinct from the cited references.

Support for claim 19 as amended is in the specification at page 2, lines 10-12 and page 49, line 7 – page 50, line 1.

Also in contrast to the cited references, claim 24 includes:

writing an image based on display data on a display which uses a material having a memory effect by supplying electric power to the display from an electric power source, the display having a write mode for writing an image on the display and a display mode for displaying the image written in the write mode without electric power, and when the write mode is interrupted before completion of the writing of the image, an incomplete image including a part of the image remains to be displayed on the display in the display mode;

issuing a specified command to instruct the electronic information device how to operate in response to a manual operation of a first input member by an operator; and

when the first input member is operated while writing of an image based on display data on the display is being performed, invalidating the command sent from the first input member, and, when the first input member is operated after completion of the writing of an image based on display data, controlling the electronic information device in accordance with the command sent from the first input member;

whereby when the first input member is operated during writing of an image based on the display data on the display, the display completely displays the image which was being written based on the display data when the first input member was operated after the electric power source has been turned off.

Neither of the cited references shows or suggests “issuing a specified command to instruct the electronic information device how to operate in response to a manual operation of a first input member by an operator” and “invalidating the command sent from the first input member, and, when the first input member is operated after completion of the writing of an image based on display data, controlling the electronic information device in accordance with

the command sent from the first input member.” In addition, the cited references do not show or suggest a process using a display that is capable of displaying “the image written in the write mode without electric power” and, as such “when the write mode is interrupted before completion of the writing of the image, an incomplete image including a part of the image remains to be displayed on the display in the display mode.”

Therefore, the cited references do not support a *prima facie* case for obviousness of claim 24 and claim 24 is patentably distinct from the cited references. Claims 25-29 are dependent upon claim 24 and thus include every limitation of claim 24. Therefore, the cited references do not support a *prima facie* case for obviousness of claims 25-29 and claims 25-29 are also patentably distinct from the cited references.

Support for claim 24 as amended can be found in the specification at Page 22, line 7 and 11-15, and page 22, line 25 – page 23, line 1.

Accordingly, it is respectfully requested that the rejection of claims 1, 3-5, 7, 9-15, 17-19, 21, and 23-29 under 35 U.S.C. § 103(a) as being unpatentable over Yamazaki in view of Matsuzaki, be reconsidered and withdrawn.

New Claims

New claim 30 includes:

- an electric power source for supplying driving power to the display;
- a first input member to be operated by an operator to issue a turn-off command to turn off the electric power source; and
- a controller which, in response to a command to turn off the electric power source which is issued while the display is performing writing of an image based on display data by consuming electric power supplied from the electric power source, turns off the electric power source after completion of the writing of the image which is being written on the display based on the display data when the command to turn off the electric power source is issued;

whereby the display displays a complete image based on the display data after the electric power source has been turned off.

The cited references do not show or suggest “a controller which, in response to a command to turn off the electric power source which is issued while the display is performing writing of an image based on display data by consuming electric power supplied from the electric power source, turns off the electric power source after completion of the writing of the image which is being written on the display based on the display data when the command to turn off the electric power source is issued,” where the turn off command is issued from a first input member that is operated by an operator. Therefore, claim 30 is patentably distinct from the prior art.

New claim 31 includes:

- a controller which resets a timer value when the manual operation of the input member is conducted, and increment the timer value when the write mode has been completed;

- wherein the controller performs the following processes:

- an automatic power-off process which turns off the electric power source automatically when a timer value exceeds a predetermined value;

- whereby the display displays a complete image based on display data after the electric power source has been turned off.

The cited references do not show or suggest a controller that increments a timer when the write mode has completed. Therefore, claim 31 is patentably distinct from the prior art.

New claim 32 includes:

- a first input member which is manually operated by an operator to input a specified command to instruct the electronic information device how to operate; and

- a controller which, when the first input member is operated while writing an image based on display data on the display is being performed, invalidates the command sent from the first input member and, when the first input member is operated after completion of the writing of an image based on display data, controls the electronic information device in accordance with the command sent from the first input member;

- whereby when the first input member is operated while writing the image based on the display data on the display, the display completely

displays the image which is being written based on the display data when the first input member is operated after an electric power source supplying power to the display has been turned off.

The cited references do not show or suggest "a controller which, when the first input member is operated while writing an image based on display data on the display is being performed, invalidates the command sent from the first input member." Therefore, claim 32 is patentably distinct from the prior art.

CONCLUSION

Wherefore, in view of the foregoing amendments and remarks, this application is considered to be in condition for allowance, and an early reconsideration and a Notice of Allowance are earnestly solicited.

This Amendment increases the number of independent claims by 3 from 6 to 9, does not increase the total number of claims, and does not present any multiple dependency claims. Accordingly, a Response Transmittal and Fee Authorization form authorizing the amount of \$600.00 to be charged to Sidley Austin LLP Deposit Account No. 18-1260 is enclosed herewith in duplicate. However, if the Response Transmittal and Fee Authorization form is missing, insufficient, or otherwise inadequate, or if a fee, other than the issue fee, is required during the pendency of this application, please charge such fee to Sidley Austin LLP Deposit Account No. 18-1260.


If an extension of time is required to enable this document to be timely filed and there is no separate Petition for Extension of Time filed herewith, this document is to be construed as also constituting a Petition for Extension of Time Under 37 C.F.R. § 1.136(a) for a period of time sufficient to enable this document to be timely filed.

Any other fee required for such Petition for Extension of Time and any other fee required by this document pursuant to 37 C.F.R. §§ 1.16 and 1.17, other than the issue fee,

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and not submitted herewith should be charged to Sidley Austin LLP Deposit Account No. 18-1260. Any refund should be credited to the same account.

Respectfully submitted,

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